CLAIMS AMENDMENT

1-15. (cancelled)

16. (new): A method for identifying an inhibitor of NACP/α-synuclein aggregation comprising:

providing a test compound, a first sample and a second sample, wherein each sample comprises NACP/α-synuclein;

inducing NACP/α-synuclein aggregation in the first sample and second sample by subjecting them to a metal-ion catalyzed oxidative condition;

exposing the first sample to the test compound;

measuring an aggregation level of NACP/α-synuclein in the first sample and the second sample; and

comparing the aggregation level of NACP/α-synuclein in the first sample and with the aggregation level of the second sample, wherein less aggregation in the first sample is indicative that the test compound is an inhibitor of NACP/α-synuclein aggregation.

17. (new): The method of claim 16, wherein the aggregation inhibitor comprises a non-amyloidogenic protein that inhibits aggregation of NACP/α-synuclein.

18. (new): The method of claim 17, wherein the non-amyloidogenic protein comprises β-synuclein.

19. (new): The method of claim 16, wherein the aggregation inhibitor comprises an agent that promotes the expression of anti-amyloidogenic proteins.

20. (new): The method of claim 19, wherein the anti-amyloidogenic protein comprises β-synuclein.

21. (new): The method of claim 16, wherein the first sample comprises cells that express NACP/α-synuclein.

22. (new): The method of claim 21, wherein the cells are neuronal cells.

23. (new): The method of claim 22, wherein the neuronal cells comprise cell of the substantia nigra region of the brain.

24. (new): The method of claim 16, wherein the metal-ion catalyzed oxidative condition comprise iron ions.

25. (new): The method of claim 24, wherein the iron ions comprise a ferric ion or a ferrous ion.

26. (new): The method of claim 24, wherein the iron ions comprise a ferric chloride or a ferrous chloride.

27. (new): The method of claim 16, wherein the first and the second sample are derived from the same source.

28. (new): The method of claim 16, wherein the NACP/α-synuclein comprises a human recombinant NACP/α-synuclein.

29. (new): A method for inhibiting NACP/α-synuclein aggregation comprising:

inducing NACP/α-synuclein aggregation in a sample comprising NACP/α-synuclein by subjecting the sample to a metal-ion catalyzed oxidative condition;

exposing the sample to an aggregation inhibitor, whereby aggregation level of NACP/α-synuclein is inhibited.

30. (new): The method of claim 29, wherein the aggregation inhibitor comprises a non-amyloidogenic protein that inhibits aggregation of NACP/α-synuclein.

31. (new): The method of claim 29, wherein the non-amyloidogenic protein comprises a β-synuclein.

32. (new): The method of claim 29, wherein the metal-ion catalyzed oxidative condition is generated by adding iron ions and hydrogen peroxide to the sample.

33. (new): The method of claim 32, wherein the iron ions comprise a ferric ion or a ferrous ion.

34. (new): The method of claim 32, wherein the iron ions comprise a ferric chloride or a ferrous chloride.

35. (new): The method of claim 29, wherein the NACP/α-synuclein comprises a human recombinant NACP/α-synuclein.

36. (new): The method of claim 29, wherein the first sample comprises cells that express NACP/α-synuclein.

37. (new): The method of claim 36, wherein the cells are neuronal cells.

38. (new): The method of claim 37, wherein the neuronal cells comprise cell of the substantia nigra region of the brain.

39. (new): A method of testing for a treatment of a neurodegenerative disease comprising:

providing a first and a second sample, wherein the samples are derived from the same source and comprise NACP/α-synuclein;

inducing oxidative conditions comprising use of an oxidizing agent and an iron ion;

inducing protein aggregation in the first and second sample by exposure of the samples to the oxidizing agent;

exposing the first sample to a test treatment;

measuring protein aggregation in the first and second samples and comparing the level of NACP/α-synuclein aggregation in the first sample with the level of NACP/α-synuclein aggregation

in the second sample, wherein less aggregation of in the first sample indicates that the test treatment is effective inhibiting or disrupting NACP/α-synuclein protein aggregation, thereby indicating it as a treatment for a neurodegenerative disease.